

CATALOGUE OF TYPE FOSSILS IN THE GEOLOGICAL MUSEUM AT THE OHIO STATE UNIVERSITY.

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INTRODUCTION.

The following catalogue consists of an alphabetic list of all fossil types (holotypes, paratypes, and cotypes), all subsequently described and figured specimens (plesiotypes), as well as artificial models of type fossils (plastotypes) in the Geological Museum of The Ohio State University. It is patterned directly after the catalogue compiled by Dr. Charles Schuchert, assisted by W. H. Dall, T. W. Stanton, and R. S. Bassler, for the fossil invertebrates in the United States National Museum.¹

The catalogue is designed for the convenience of workers in Paleontology and in response to a constant inquiry for information concerning type specimens of Ohio fossils. Unfortunately, many of the type fossils thought to be located here, according to statements in the older reports of the Geological Survey of Ohio, are missing, and although some of them may have been lost at some former time, it seems probable that many have never been placed in this Museum, but have found their way into other collections. An attempt is now being made to recover as many as possible of the types which have been described in the reports of the Geological Survey of Ohio, and any information concerning the location of such specimens will be appreciated.

The work of collecting the data for the following catalogue of type fossils extended over a period of several years during which the writer has been engaged in identifying and reclassifying the paleontological material in the Geological Museum at The Ohio State University. The writer wishes to acknowledge her indebtedness to Dr. J. Ernest Carman, curator of the Museum, under whose direction the work was carried on, for his kind advice and for the many helpful suggestions which he has given her.

¹ Schuchert, U. S. Nat. Mus., Bull. 53, Pt. 1, 1905.

The following data is given concerning each entry in the catalogue: (1) catalogue number; (2) name of form as described or figured; (3) kind of type with number of specimens included in the entry;¹ (4) formation and locality; (5) reference to author and place of publication with additional synonymy where the type specimen has subsequently been described and figured; (6) citation of the present name if different from the original name, or cross-references where the species appears under more than one name in the catalogue. The name of the author is placed in parenthesis when the same generic name is not used as that under which it was originally described.

The definitions of terms applied to type fossils are the same in the present work as those employed by Dr. Charles Schuchert in his catalogue of type specimens of fossil invertebrates in the United States National Museum.² The following terms are used:

Primary Types or Proterotypes.

Holotype.—A single specimen selected from the original material as the type of a species, or a single specimen upon which a species is based is known as the holotype.

Paratype.—If a holotype has been selected, but if other specimens are also mentioned, described, figured, or in any way aid in the original description, the latter are called paratypes. A species may therefore have both holotype and one or more paratypes.

Cotypes.—If no holotype is selected from the original material, and if two or more specimens are used in describing and figuring a species, these types are known as cotypes.

Chirotype.—Chirotype is the term applied to material described in manuscript form. After the manuscript has been published the chirotype will become either a holotype, paratype, etc.³

¹ When more than one specimen is included in a single entry, as is often the case in cotypes, plesiotypes, etc., the number of specimens is given in parenthesis after the kind of type. Thus there are many more individual type specimens than there are entries in the catalogue.

² Schuchert, U. S. Nat. Mus., Bull. 53, Pt. 1, 1905, pp. 9-15.

³ In this catalogue chirotypes have been marked whenever possible by placing after the prefix "Chiro" (manuscript) the kind of type which the material will become after the publication of the manuscript, as *Chiroholotype*, *Chiroparatype*, etc. In cases, however, in which the investigation has not progressed far enough to designate a specimen as chiroholotype, chirocotype, etc., only the term *Chirotype* is used. Likewise in such instances no catalogue number has yet been assigned.

Secondary or Supplementary Types.

Plesiotype.—A specimen from any locality which is compared with a species already established, and which is described and figured as such, is called a plesiotype.

Artificial Models.

Plastotype.—An artificial cast or model made directly from a primary type is called a plastotype.

Figured Specimens.

A number of specimens are included which cannot be classed as real types, but which have been figured, as for example, *Amphibian Coprolites*, *Fish Spine*, etc.; likewise in the same class comes all figured material to which no specific name has been assigned, as *Cythere?* sp., *Palaeoniscus* sp., etc. Such entries are marked *figured*.

In conclusion, the catalogue contains 277 entries, of which there are 57 holotypes, 16 paratypes, 36 cotypes, 124 plesiotypes, 27 chiotypes, 3 plastotypes, and 14 figured specimens. The following tables show the number of types and figured specimens from the several systems, and the zoological distribution of these in the different phyla and classes of the animal kingdom.

TABLE I.
SHOWING THE NUMBER OF TYPES IN THE SEVERAL SYSTEMS.

Group	System	Number of Types
Paleozoic	Ordovician	27
	Silurian	55
	Devonian	27
	Mississippian	15
	Pennsylvanian	135
	Permian	17
Cenozoic	Pleistocene	1

Marking of Types.

For the marking of type fossils in the Geological Museum at The Ohio State University small colored stars are used—red for primary types as well as for plastotypes, and green for secondary or supplementary types. A star is affixed both to the specimen and to its label, and thus the types can be easily singled out in an exhibition case of fossils

TABLE II.
SHOWING ZOOLOGICAL DISTRIBUTION OF TYPES.

Phylum	Number of Types	Class	Number of Types
Protozoa	3	Sarcodina Order Foraminifera	3
Porifera	2	Silicispongiæ	1
		Calcispongiæ	1
Coelenterata	10	Anthozoa	9
		Hydrozoa	1
Vermes	1	Chætopoda	1
Echinodermata	13	Cystoidea	1
		Blastoidea	1
		Crinoidea	10
		Echinoidea	1
Molluscoidea	88	Bryozoa	11
		Brachiopoda	77
Mollusca	145	Pelecypoda	76
		Gastropoda	41
		Scaphopoda	2
		Cephalopoda	26
Arthropoda	6	Crustacea	5
		Arachnida Order Eurypterida	1
Vertebrata	19	Pisces	16
		Amphibia	2
		Mammalia	1

ALPHABETICAL CATALOGUE

- 14034 *Acanthopecten carboniferous* Stevens. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 308, Pl. XV,
Fig. 4.
- 14035 *Acanthopecten ohioensis* Mark. Holotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 308, Pl. XV,
Fig. 5.
- 3743 *Acervularia davidsoni* Edwards and Haime.
See *Stylastrea anna*.
- 14050 *Aclisina? cancellatus* Mark. Holotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 315, Pl. XVI,
Fig. 11.
- 14048 *Aclisina conditi* Mark. Cotypes (2).
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 314, Pl. XVI,
Figs. 8, 9.
- 14051 *Aclisina (?) costata* Mark. Holotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 315, Pl. XVI,
Fig. 12.
- 14047 *Aclisina formosa* Mark. Holotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 314, Pl. XVI,
Fig. 7.
- 14052 *Aclisina (?) ornata* Mark. Holotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 316, Pl. XVI,
Fig. 13.
- 14049 *Aclisina pumila* Mark. Holotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 314, Pl. XVI,
Fig. 10.
- 14045 *Aclisina stevensana* (Meek and Worthen). Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 313, Pl. XVI,
Fig. 5.
- 14046 *Aclisina swallowana* (Geinitz). Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 313, Pl. XVI,
Fig. 6.
= *Pleurophorella geintzi*.

- 14038 *Allerisma geinitzi* Meek. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 310, Pl. XV,
Fig. 11.
- 4668 *Allerisma terminale* Hall. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 234, Pl.
XIII, Fig. 15.
- 14024 *Ambocoelia planoconvexa* (Shumard). Plesiotype.
Ames limestone, Conemaugh (Penn.). Athens, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 304, Pl. XIV,
Figs. 5, 6.
- 13309 *Ambocoelia umbonata* var. *gregaria* Hall. Plesiotypes (2).
Chagrin (Up. Dev.). Road two miles east of Trumbull
Center, Trumbull Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 539, Pl. XXXI,
Figs. 6-9.
- 9062 *Amphicoelia (Leptodomus?) costata* Hall and Whitfield. Holotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 140, Pl. VII, Fig. 23.
MILLER. *N. Am. Geol. and Pal.*, 1889, p. 461, Fig. 773.
- 15256 *Anthraconeilo bownockeri* Morningstar. Holotype.
Sharon ore, Pottsville (Penn.). Near mouth of Lick Run,
Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 208,
Pl. X, Fig. 21.
- 15161 *Anthracopupa (?) dunkardana* Stauffer and Schroyer. Cotypes (5).
to Lower Washington limestone, Dunkard (Perm.). One-half
15164 mile south of Pleasant Grove, Belmont Co., Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 144, Pl. XI, Figs. 12-16.
- 15211 *Archaeocidaris spine*. Figured.
Lower Mercer limestone, Pottsville (Penn.). Vernon Tp.,
Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 156,
Pl. VI, Fig. 15.
- 15291 *Astartella concentrica* (Conrad). Plesiotypes (2).
15292 Upper Pottsville (Penn.). Carbon Hill, Hocking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 241, Pl.
XIII, Figs. 12, 13.
- 15293 *Astartella newberryi* Meek. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Southeast of
Frazeyburg, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 242,
Pl. XIII, Fig. 14.

- 14042 *Astartella portersvillensis* Mark. Cotypes (2).
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 311, Pl. XV,
Figs. 15, 16.
- 15298 *Astartella varica* McChesney. Plesiotypes (2).
15299 Upper Pottsville (Penn.). Carbon Hill, Hocking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 243,
Pl. XIV, Figs. 1, 2.
- 15300 *Astartella varica* McChesney. Plesiotype.
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 243,
Pl. XIV, Fig. 3.
- 14040 *Astartella vera* Hall. Plesiotype.
Brush Creek limestone, Conemaugh (Penn.). Trimble, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 311, Pl. XV,
Fig. 13.
- 14041 *Astartella vera* Hall. Plesiotype.
Ames limestone, Conemaugh (Penn.). Caldwell, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 311, Pl. XV,
Fig. 14.
- 9012 *Athyris (Seminula?)* sp. Figured.
Waverly (Miss.). Sciotoville, Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 2, 1894, p. 83, Pl.
XLVII, Fig. 35.
- 13310 *Athyris polita* Hall. Plesiotypes (2).
13311 Chagrin (Up. Dev.). Chippewa Creek, Cuyahoga Co., and
Trumbull Creek, one-fourth mile south of Trumbull Center,
Trumbull Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 540, Pl. XXXI,
Figs. 10, 11.
- 15225 *Aulacorhynchus millepunctatus* Meek and Worthen. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Vernon Tp.,
Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 180, Pl.
VII, Fig. 12.
- 3208 *Avicula whitfieldi* Foerste. Holotype.
Brassfield (Sil.). Todd's Fork, Wilmington, Ohio.
FOERSTE. *Geol. Surv. Ohio*, Vol. VII, 1893, p. 558, Pl. 37, Fig. 5.
See *Cypricardites ferrugineum*.
= *Cyrtodonta (?) ferruginea*.
- 14033 *Aviculopecten herzeri* Meek. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 307, Pl. XIII,
Fig. 3.
MORNINGSTAR. *Idem*. Bull. 25, 1922, p. 226, Pl. XIII, Fig. 3.

- 15246 *Aviculopecten herzeri* Meek. Plesiotype.
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 226, Pl. XIII, Fig. 4.
- 15213 *Bascomella gigantea* Morningstar. Cotypes (13).
McArthur limestone, Pottsville (Penn.). Monroe Furnace, Jackson Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 157, Pl. VI, Figs. 18-20.
- 2827 *Batostoma jamesi* (Nicholson). Paratypes (9).
See *Chaetetes jamesi*.
Berenicea elkhornensis Shideler mss. Chirotype.
Elkhorn, Cincinnati (Ord.). Richmond, Indiana.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
Brachiospongia maysvillensis Shideler mss. Chirotype.
Mt. Hope, Cincinnati (Ord.). Ripley, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
- 12208 *Bulimorpha canaliculata* Hall. Plesiotype.
Maxville (Miss.). Cut 4, Mt. Perry, Fultonham, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911, p. 400, Fig. 25.
- 14054 *Bulimorpha minuta* (Stevens). Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 317, Pl. XVI, Fig. 15.
- 13256 *Camarotoechia contracta* Hall. Plesiotypes (7).
- 13262 Chagrin (Up. Dev.). Mill Creek, two miles north of Jefferson, to Ashtabula Co., Ohio.
- 13267 PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 544, Pl. XXXII, Figs. 14-20.
- 3515 *Camarotoechia hydraulica* (Whitfield). Holotype.
Greenfield dolomite, Monroe (Sil.?). Greenfield, Ohio.
GRABAU. *Geol. Surv. Mich.*, Ser. 1, 1909, p. 128, Pl. 30, Fig. 17.
See *Rhynchonella hydraulica*.
- 13268 *Camarotoechia orbicularis* Hall and Clarke. Plesiotypes (2).
- 13269 Chagrin (Up. Dev.). Madison-Thompson road, three miles south of Madison, Lake Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 532, Pl. XXVIII, Figs. 7, 8.
- 10422 *Ceramopora* (?) *beani* James. Holotype.
Cincinnati (Ord.). Lebanon, Ohio.
JAMES. *Paleontologist* No. 1, 1878, p. 5; Jour. Cinci. Soc. Nat. Hist., Vol. 7, 1884, p. 23, Figs. 3, 3b.
= *Paleschaera beani*.

- 2827 *Chaetetes jamesi* Nicholson. Paratypes (9).
Eden shale, Cincinnati (Ord.). Cincinnati, Ohio.
NICHOLSON. *Quart. Jour. Geol. Soc. London*, 30, 1874, p. 506, Pl. 29,
Figs. 10, 10b; Pal. Ohio, Vol. II, 1875, p. 200, Pl. 21, Figs. 11, 11b.
= *Batostoma jamesi*.
- Chasmops pulchra* Shideler mss. Chirotype.
Liberty, Cincinnati (Ord.). Oxford, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
- 15228 *Chonetes choteauensis* Mather. Plesiotypes (3).
- 15229 Lowellville limestone, Pottsville (Penn.). Poverty Run,
Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 178, Pl.
VII, Figs. 16-18.
- 14015 *Chonetes granulifera* Owen. Plesiotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 200, Pl. XIII,
Fig. 3.
- 15226 *Chonetes mesolobus* Norwood and Pratten. Plesiotypes (2).
- 15227 Lower Mercer limestone, Pottsville (Penn.). Southeast of
Frazeyburg, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 179,
Pl. VII, Figs. 14, 15.
- 13270 *Chonetes minutus* Prosser. Cotypes (4).
to Chagrin (Up. Dev.). Run, two miles south of Monroe Center,
13272 Ashtabula Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 540, Pl.
XXXII, Figs. 1-5.
- 13273 *Chonetes scitulus* Hall. Plesiotype.
Chagrin (Up. Dev.). Tinkers Creek, Cuyahoga Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 541, Pl.
XXXII, Fig. 6.
- 14016 *Chonetes verneuillanus* Norwood and Pratten. Plesiotypes (2).
Portersville limestone, Conemaugh (Penn.). Blue Rock Tp.,
Muskingum Co., Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 301, Pl. XIII,
Figs. 4, 5.
- 12197 *Cleiothyris hirsuta* Hall. Plesiotype.
Maxville (Miss.). Harper Shaft, Olive Furnace, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911,
p. 388, Fig. 15.
- 3208 *Clidophorus ferrugineus* (Foerste). Holotype.
See *Nuculites (Cleidophorus) ferrugineum*.
- 8909 *Colummaria alveolata* Goldfuss.
See *Favistella stellata*. Plesiotype?
- 14026 *Composita subtilita* (Hall). Plesiotype (4).
Cambridge limestone, Conemaugh (Penn.). Langsville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 305, Pl. XIV,
Figs. 9, 10.

- 15235 *Composita subtilita* (Hall). Plesiotypes (4).
to Lower Mercer limestone, Pottsville (Penn.). Southeast of
15238 Frazeyburg, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 192, Pl. VIII, Figs. 10-13.
- 7293B *Conchidium colletti* (Miller). Plesiotype.
Niagaran (Sil.). Three miles above Logansport, Indiana.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 2, 1895, p. 235, Pl. LXVI, Figs. 16, 17.
- 7296 *Conchidium obsoletum* Hall and Clarke. Holotype and Paratypes (5).
Guelph (Sil.). Genoa, Ottawa Co., Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 2, 1895, Pl. LXVII, Figs. 8, 9; 14th Rep. State Geol. New York for 1894, 1897, p. 366, Pl. 11, Figs. 1, 2; 48th Rep. New York State Mus. for 1895, 2, 1897, p. 366, Pl. 11, Figs. 1, 2.
- 15188 *Coprolites*, probably from Amphibians. Figured (4).
to Creston Reds, Dunkard (Perm.). One mile east of Elba, Ohio.
- 15191 STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920, p. 147, Pl. XIII, Figs. 41-44.
- 15177 *Coprolites*, probably from Fishes. Figured (6).
to Elm Grove limestone, Dunkard (Perm.). Raven Rocks, two
15182 miles north of Beallsville, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920, p. 146, Pl. XII, Figs. 30-35.
- 14083 *Corallidomus concentrica* Whitfield. Cotype.
Liberty, Richmond (Ord.). Brown Co., Ohio.
WHITFIELD. *Geol. Surv. Ohio*, Vol. VII, 1893, p. 492, 493, Fig. 2; Pl. XIII, Fig. —.
ULRICH. *Idem.*, p. 493, Pl. LV, Figs. 15, 16.
- Cornulites striatus* Shideler mss. Chirotype.
McMicken, Cincinnati (Ord.). Cincinnati, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
- 15288 *Crenipecten foerstii* Herrick. Plesiotypes (2).
- 15289 Lower Mercer limestone, Pottsville (Penn.). Southeast of
Frazeyburg, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 230, Pl. XIII, Figs. 7, 8.
- 15206 *Crinoid Stems*. Figured (5).
to Lower Mercer limestone, Pottsville (Penn.). Symmes Creek,
15210 Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 155, Pl. VI, Figs. 9-13.
- 2999 *Cuneamya miamiensis* Hall and Whitfield. Paratypes (9).
Waynesville, Richmond (Ord.). Waynesville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 9, Pl. II, Figs. 9, 10.
- 2995 *Cuneamya scapha* Hall and Whitfield. Holotype.
Waynesville, Richmond (Ord.). Near Waynesville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 92, Pl. II, Fig. 2.

- 12202 *Cypricardella oblonga* Hall. Plesiotype.
Maxville (Miss.). Cut 4, Mt. Perry-Fultonham, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911,
p. 394, Fig. 20.
- 4610 *Cypricardinia* (?) *carbonaria* Meek. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Bald Knob,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 244,
Pl. XI, Fig. 14.
- 3208 *Cypricardites ferrugineum* Hall and Whitfield. Holotype.
Brassfield (Sil.). Todd's Fork, Wilmington, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 116, Pl. V, Fig. 11.
See *Avicula whitfieldi*.
= *Cyrtodonta* (?) *ferruginea*.
- 13275 *Cyrtia alta* Hall. Plesiotype.
Chagrin (Up. Dev.). Three miles south of Madison, Geauga
Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 536, Pl. XXX,
Fig. 4.
- 5887 *Cyrtoceras herzeri* Hall and Whitfield. Holotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 150, Pl. VIII, Figs. 8, 9.
= *Hexamoceras herzeri*.
- 3431 *Cyrtoceras myrice* Hall and Whitfield. Paratypes (2).
14803 Niagaran (Sil.). Yellow Springs, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 149, Pl. VIII, Fig. 9.
= *Kionoceras myrice*.
- 14802 *Cyrtoceras cf. myrice* Hall and Whitfield. Paratype.
Niagaran (Sil.). Yellow Springs, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 149, Pl. VIII, Fig. 9.
= *Kionoceras myrice*.
- 3411 *Cyrtoceras percurvatum* Foerste mss. Chiroholotype.
Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE, *Manuscript on Silurian Cephalopoda*.
- 14805 *Cyrtoceras radiciforme* Foerste mss. Chiroholotype.
Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE, *Manuscript on Silurian Cephalopoda*.
- 3208 *Cyrtodonta* (?) *ferruginea* (Hall and Whitfield). Holotype.
See *Avicula whitfieldi* and *Cypricardites ferrugineum*.
- 15171 *Cythere* (?) sp. Figured (6).
to Elm Grove limestone, Dunkard (Perm.). Little Short Creek,
15176 Martins Ferry, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 146, Pl. XI, Figs. 24-29.

- 13276 *Dalmanella tioga* var. *elmira* Williams. Plesiotypes (3).
to Chagrin (Up. Dev.). Chippewa Creek, Cuyahoga Co.,
13278 Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 530, Pl. XXVIII, Figs. 1-6.
- 3428 *Dawsonoceras annulatum* (Sowerby). Paratypes (9).
3432 See *Orthoceras annulatum*.
9499
- 15286 *Deltopecten scalaris* (Herrick). Plesiotypes (2).
15287 Lower Mercer limestone, Pottsville (Penn.). Vernon Tp., Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 228, Pl. XIII, Figs. 5, 6.
- 12203 *Dentalium illinoiense* Worthen. Plesiotype.
Maxville (Miss.). Cut 4, Mt. Perry-Fultonham, Ohio.
MORSE, *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, p. 395, Fig. 21.
= *Laevidentalium illinoiense*.
- 14014 *Derbya crassa* (Meek and Hayden). Plesiotype.
Ames limestone, Conemaugh (Penn.). Deersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 300, Pl. XIII, Fig. 2.
- 15222 *Derbya crassa* (Meek and Hayden). Plesiotype.
Lowellville limestone, Pottsville (Penn.). Poverty Run, Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 176, Pl. VII, Fig. 9.
- 15223 *Derbya crassa* (Meek and Hayden). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Bald Knob, Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 176, Pl. VII, Fig. 10.
- 15224 *Derbya robusta* (Hall). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Vernon Tp., Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 177, Pl. VII, Fig. 11.
- 10419 *Dermatostroma scabrum* (James). Holotype.
See *Stromatopora scabra*.
- 7304 *Discoceras graftonense* (Meek and Worthen). Chiroplesiotype.
Niagaran (Sil.). Rising Sun, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 7057 *Discoceras ortonii* (Meek). Chiroplesiotype.
Niagaran (Sil.). Wilmington, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.

- 3404 *Discoceras orton* (Meek). Holotype.
Niagaran (Sil.). Greenville, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
See *Litu*ites (?) *orton* Meek.
- 9003 *Dicraniscus orton* Meek. Cotype.
Top of Brassfield (Sil.). Near Dayton, Ohio.
MEEK. *Am. Jour. Sci.*, Third Ser., Vol. 4, 1872, p. 283.
= *Triplecia orton*.
- 8569 *Dictyostruma undulatum* Nicholson. Holotype.
Niagaran (Sil.). Louisville, Kentucky.
NICHOLSON. *Pal. Ohio*, Vol. II, 1875, p. 254, Pl. 24, Figs. 6-6c.
- 15187 *Diplodus washingtonensis* Stauffer and Schroyer. Holotype.
Lower Washington limestone, Dunkard (Perm.). North end
of Shadyside, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 147, Pl. XIII, Fig. 40.
- 15192 *Edaphosaurus* sp. (Neural spine). Figured (2).
- 15193 Creston Reds, Dunkard (Perm.). Marietta, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 147, Pl. XIII, Figs. 45, 46.
- 14027 *Edmondia aspinwallensis* Meek. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1920, p. 305, Pl. XIV,
Fig. 11.
MORNINGSTAR. *Idem.*, Bull. 25, 1922, p. 197, Pl. X, Fig. 7.
- 15257 *Edmondia gibbosa* (McCoy). Plesiotypes (2).
- 15258 Lower Mercer limestone, Pottsville (Penn.). Southeast of
Fairview School, Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 197,
Pl. X, Figs. 4, 5.
- 15259 *Edmondia meekiana* (Herrick)? Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 198,
Pl. X, Fig. 6.
- 15158 *Edmondia* (?) *minuta* Stauffer and Schroyer. Holotype.
Washington limestone, Dunkard (Perm.). Shadyside, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 144, Pl. XI, Fig. 9.
- 15260 *Edmondia ovata* Meek and Worthen. Plesiotypes (2).
- 15261 Lower Mercer limestone, Pottsville (Penn.). Bald Knob,
Licking Co., and southeast of Fairview School, Muskingum
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 199, Pl. X,
Figs. 8, 9.

- 14028 *Edmondia reflexa* Meek. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 305, Pl. XIV, Fig. 12.
- 15159 *Edmondia* (?) *washingtonensis* Stauffer and Schroyer. Cotype.
Cassville shale Dunkard (Perm.). Beckett Station, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920, p. 144, Pl. XI, Fig. 10.
- 15160 *Edmondia* (?) *washingtonensis* Stauffer and Schroyer. Cotype.
Lower Washington limestone, Dunkard (Perm.). Shadyside, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920, p. 144, Pl. XI, Fig. 11.
- 15290 *Entolium aviculatum* Swallow. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Rock Cut, Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 232, Pl. XIII, Fig. 9.
- 14036 *Entolium prosseri* Mark. Cotypes (3).
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 309, Pl. XV, Figs. 6-8.
- 13867 *Eucalyptocrinus proboscidalis* Miller. Holotype and Plastotype.
8263 Cedarville dolomite (Sil.). Pontiac, five miles northeast of Piqua, Ohio.
MILLER. *Jour. Cinci. Soc. Nat. Hist.*, Vol. V, 1882, p. 224, Pl. IX, Fig. 2.
FOERSTE. *Ohio Jour. Sci.*, Vol. XXI, No. 2, Dec., 1920, p. 70, Fig. 4.
- 3299 *Eucalyptocrinus splendidus* Hall and Whitfield. Holotype.
Niagaran (Sil.). Springfield, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 128, Pl. VI, Fig. 12.
- 12196 *Eumetria marcyi* Shumard. Plesiotype.
Maxville (Miss.). Olive Furnace, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911, p. 386, Fig. 14.
- 9787 *Eupachyrinus mooresi* (Whitfield). Plesiotypes (2).
15205 Upper Pottsville (Penn.). Carbon Hill, Hocking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 154, Pl. VI, Figs. 7, 8.
- 15308 *Euphemus carbonarius* (Cox). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge, Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 249, Pl. XV, Figs. 4, 5.
- 15306 *Euphemus nodocarinatus* (Hall). Plesiotypes (2).
15307 Upper Pottsville (Penn.). Carbon Hill, Hocking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 249, Pl. XV, Figs. 1, 2.

- 4478 *Eurylepis corrugatus* Newberry. Holotype.
Upper Freeport, Allegheny (Penn.). Linton, Ohio.
NEWBERRY. *Proc. Acad. Nat. Sci. Phil.*, loc. cit.; *Pal. Ohio*, Vol. I, 1873,
p. 350, Pl. 38, Figs. 4, 4a.
- 4514 *Eurylepis insculptus* Newberry. Holotype.
Upper Freeport, Allegheny (Penn.). Linton, Ohio.
NEWBERRY. *Proc. Acad. Nat. Sci. Phil.*, loc. cit.; *Pal. Ohio*, Vol. I,
1873, p. 351, Pl. XXXIX, Figs. 2, 2a.
- 4565 *Eurylepis lineatus* Newberry. Holotype.
Upper Freeport, Allegheny (Penn.). Linton, Ohio.
NEWBERRY. *Proc. Acad. Nat. Sci. Phil.*, loc. cit.; *Pal. Ohio*, Vol. I, 1873,
p. 353, Pl. 39, Figs. 7, 7a.
- 4563 *Eurylepis ovoideus* Newberry. Holotype.
Upper Freeport, Allegheny (Penn.). Linton, Ohio.
NEWBERRY. *Proc. Acad. Nat. Sci. Phil.*, loc. cit.; *Pal. Ohio*, Vol. I,
1873, p. 351, Pl. XXXIX, Fig. 1.
- 4508 *Eurylepus striolatus* Newberry. Holotype.
Upper Freeport, Allegheny (Penn.). Linton, Ohio.
NEWBERRY. *Pal. Ohio*, Vol. I, 1873, p. 355.
- 3510 *Eurypteris eriensis* Whitfield. Cotype.
Put-in-Bay dolomite, Monroe (Sil.?). Lake Erie, Ohio.
WHITFIELD. *Ann. New York Acad. Sci.* Vol. II, 1882, p. 196; *Idem.*, Vol.
V, 1891, p. 515, Pl. V, Fig. 32; *Geol. Surv. Ohio*, Vol. VII, 1893; p.
416, Pl. I, Fig. 32.
GRABAU. *Geol. Surv. Mich.*, Ser. 1, 1919, p. 208, Pl. XXX, Fig. 32.
= *Eurypteris microphthalmus*.
- 3510 *Eurypteris microphthalmus* Hall.
See *Eurypteris eriensis*. Cotype.
- 3756 *Favosites pleurodictyoides* Nicholson. Cotype.
Columbus limestone (Dev.). Kelley's Island, Ohio.
NICHOLSON. *Pal. Ohio*, Vol. II, 1875, p. 231, Pl. XXIII, Figs. 3, 3b.
- 8909 *Favistella stellata* Hall. Plesiotype?
Richmond (Ord.). Cincinnati, Ohio.
NICHOLSON. *Pal. Ohio*, Vol. II, 1875, p. 185.
= *Columnaria alveolata*.
- 3292 *Fenestella nervata* Nicholson. Holotype.
Niagaran (Sil.). Cedarville, Ohio.
NICHOLSON. *Pal. Ohio*, Vol. II, 1875, p. 264, Pl. XXV, Figs. 11, 11a.
= *Philoporella nervata*.
- 15184 *Fish plate* (probably cranial plate). Figured.
Elm Grove limestone, Dunkard (Perm.). Raven Rocks,
Belmont Co., Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 146, Pl. XIII, Fig. 37.

- 15183 *Fish spine (Elasmobranch)*. Figured.
Shales above Waynesburg "A" Coal, Dunkark (Perm.).
Clarington, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 146, Pl. XII, Fig. 36.
- 15202 *Fusulina secatica* (Say). Plesiotype.
Upper Mercer flint, Pottsville (Penn.). Near Rock Cut,
Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 153, Pl.
VI, Fig. 3.
- 15203 *Girtyina ventricosa* (Meek and Worthen). Plesiotype.
Upper Mercer flint, Pottsville (Penn.). East of Mohawk
Village, Coshocton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, P. 153, Pl.
VI, Fig. 4.
- 7670 *Glossina flabellula* Hall and Clarke. Cotype.
Berea sandstone, Waverly (Miss.). Berea, Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 1, 1892, p. 172, Pl. I,
Fig. 34.
HALL. *14th Ann. Rep. New York State Geol.*, 1894, p. 326, Pl. I, Fig. 6.
- 15218 *Glossina waverlyensis* (Herrick). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Southeast of
Frazeysburg, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 169, Pl.
VII, Fig. 4.
- 15157 *Glossites* (?) *belmontensis* Stauffer and Schroyer. Holotype.
Elm Grove limestone, Dunkard (Perm.). Little Short Creek,
west of Martins Ferry, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 144, Pl. XI, Fig. 8.
- 3082 *Gomphoceras eos* Hall and Whitfield. Holotype.
Richmond (Ord.). Near Dayton, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 100, Pl. 3, Fig. 5.
- 8736 A, B, *Gomphocystites bownockeri* Foerste. Holotype and Paratype.
Niagaran (Sil.). Cedarville, Ohio.
FOERSTE. *Ohio Jour. Sci.*, Vol. XXI, No. 2, Dec., 1920, p. 57, Pl. III,
Figs. 1a, b.
- Hallopora crassa* Shideler mss. Chirotype.
Arnheim, Cincinnati (Ord.). Russellville, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
- Hemicystites edenensis* Shideler mss. Chirotype.
McMicken, Cincinnati (Ord.). Cincinnati, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
- Hemiphragma subglobosa* Shideler mss. Chirotype.
Economy, Cincinnati (Ord.). Ripley, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.

- 15314 *Hemizyga* sp. Figured.
Lower Mercer limestone, Pottsville (Penn.). Bald Knob,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*. Fourth Ser., Bull. 25, 1922, p. 260,
Pl. XV, Fig. 25.
- 10424 *Heterocrinus juvenis* Hall. Plesiotype.
Maysville (Corryville) limestone, Cincinnati (Ord.). Lebanon,
Ohio.
MEEK. *Pal. Ohio*, Vol. I, 1873, p. 10, Pl. 1, Figs. 3a, b.
- 5887 *Hexamoceras herzeri* (Hall and Whitfield). Holotype.
Niagaran (Sil.). Cedarville, Greene Co., Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
See *Cyrtoceras herzeri*.
- 3528 *Hindella* (?) (*Greenfieldia*) *whitfieldi* Grabau.¹ Cotype.
Greenfield dolomite, Monroe (Sil.). Greenfield, Ohio.
GRABAU. *Geol. Surv. Mich.*, Ser. 1, 1909, p. 149, Pl. XXX, Fig. 8.
See *Meristella bella*.
Homotrypella elegans Shideler mss. Chirotype.
Whitewater, Cincinnati (Ord.). Oxford, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
Homotrypella ramosa Shideler mss. Chirotype.
Arnheim, Cincinnati (Ord.). Russellville, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
- 14025 *Hustedia mormoni* (Marcou). Plesiotype.
Ames limestone, Conemaugh (Penn.). Steubenville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 304, Pl. XIV,
Figs. 7, 8.
MORNINGSTAR. *Idem.*, Bull. 25, 1922, p. 192, Pl. IX, Figs. 28, 29.
- 3329 *Illaenus (Bumastus) insignis* (?) Meek (not Hall). Holotype.
Niagaran (Sil.). Springfield, Ohio.
MEEK. *Pal. Ohio*, Vol. I, 1873, p. 189, Pl. XV, Figs. 5a, b, c.
= *Illaenus springfieldensis*.
- 3329 *Illaenus (Bumastus) springfieldensis* Meek. Holotype.
Niagaran (Sil.). Springfield, Ohio.
MEEK. *Pal. Ohio*, Vol. I, 1873, p. 192.
See *Illaenus (Bumastus) insignis*?
- 3238 *Inocaulis bella* Hall and Whitfield. Holotype.
Niagaran (Sil.). Yellow Springs, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 122, Pl. VI, Fig. 2.
= *Palaeodictyota bella*.

¹ A detailed study of this specimen by Dr. J. Ernest Carman has shown that it belongs to neither of the genera *Hindella* nor *Meristella*. The umbonal region was etched with HCl with the result that the pedical valve was seen to be provided with two septæ which converge slightly forward and which extend anteriorly one-third the length of the valve—features which are characteristic of the genus *Prosserella*, but not of *Hindella* or *Meristella*. This form is then a *Prosserella*, and probably the locality reference is in error.

- 3431 *Kionoceras myrice* (Hall and Whitfield). Paratype.
See *Cyrtoceras myrice*.
- 14803 *Kionoceras myrice* (Hall and Whitfield). Paratype.
Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
See *Cyrtoceras myrice*.
- 14802 *Kionoceras* cf. *myrice* (Hall and Whitfield). Paratype.
Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
See *Cyrtoceras myrice*.
- 12203 *Laevidentalium illinoisense* (Worthen). Plesiotype.
See *Dentalium illinoisense*.
- 14031 *Leda meekana* Mark. Holotype.
Portersville limestone, Conemaugh (Penn.). Portersville,
Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 307, Pl. XV,
Fig. 1.
MORNINGSTAR. *Idem.*, Bull. 25, 1922, p. 206, Pl. X, Figs. 25, 26.
- 15254 *Leda prolongata* Morningstar. Holotype.
Lower Mercer limestone, Pottsville (Penn.). Fairview School,
Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 206,
Pl. X, Fig. 28.
- 14037 *Lima retifera* Shumard. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 309, Pl. XV, Fig. 9.
MORNINGSTAR. *Idem.*, Bull. 25, 1922, p. 233, Pl. XIII, Fig. 10.
- 15215 *Lingula carbonaria* Shumard. Plesiotype.
Anthony coal, Pottsville (Penn.). Scioto Furnace, Scioto Co.,
Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 166, Pl.
VII, Fig. 1.
- 15216 *Lingula carbonaria* Shumard. Plesiotypes (2).
- 15217 Upper Mercer limestone, Pottsville (Penn.). Elk Tp., Vinton
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 166, Pl.
VII, Figs. 2, 3.
- 15151 *Lingula permiana* Stauffer and Schroyer. Cotypes (4).
to Washington limestone, Dunkard (Perm.). Near Crabapple,
15154 Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 143, Pl. XI, Figs. 1-5.
- 13259 *Liorhynchus ashtabulense* Prosser. Cotypes (4).
- 13279 Chagrin (Up. Dev.). Run two miles south of Monroe Center,
to Ashtabula Co., Ohio.
- 13281 PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 546, Pl.
XXXIII, Figs. 5-8.

- 13260 *Liorhynchus clarkei* Prosser. Cotypes (7).
13261 Chagrin (Up. Dev.). Mill Creek, two miles north of Jefferson,
13282 Ashtabula Co., Ohio.
to PROSSER. *Geol. Surv. Ohio*. Fourth Ser., Bull. 15, 1912, P. 545, Pl.
13285 XXXII, Figs. 21-23; Pl. XXXIII, Figs. 1-4.
- 13286 *Liorhynchus globuliforme* var. *chagrinanum* Prosser. Cotypes (3).
to Chagrin (Up. Dev.). Three miles south of Madison, Lake
13288 Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 533, Pl. XXIX,
Figs. 1, 2; Pl. XXVIII, Figs. 14, 15.
- 13258 *Liorhynchus newberryi* Hall. Plesiotype.
Chagrin (Up. Dev.). Run two miles south of Monroe Center,
Ashtabula Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 546, Pl.
XXXIII, Fig. 10.
- 13294 *Liorhynchus newberryi* Hall. Plesiotype.
Chagrin (Up. Dev.). Mill Creek, Eagleville, Ashtabula Co.,
Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 546, Pl.
XXXIII, Fig. 9.
- 13289 *Liorhynchus ohioense* Prosser. Cotypes (5).
to Chagrin (Up. Dev.). Trumbull Creek, Trumbull Co., and
13293 north of Gates Mill, Cuyahoga Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 532, Pl.
XXVIII, Figs. 9-13.
- 3404 *Lituities* (?) *ortoni* Meek. Holotype.
Niagaran (Sil.). Greenville, Ohio.
MEEK. *Pal. Ohio*, Vol. I, 1873, p. 186, Pl. 15, Fig. 4.
(*Gyroceras ortoni* at end of description).
= *Discoceras ortoni*.
- 14013 *Lophophyllum profundum* (Milne-Edwards and Haime). Plesio-
type.
Ames limestone, Conemaugh (Penn.). Deersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 300, Pl. XIII,
Fig. 1.
- 15204 *Lophophyllum profundum* (Milne-Edwards and Haime). Plesio-
type.
Lower Mercer limestone, Pottsville (Penn.). Near White
Cottage, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 154, Pl.
VI, Fig. 5.
- 15165 *Loxonema* (?) *parva* Stauffer and Schroyer. Cotypes (4).
to Lower Washington limestone, Dunkard (Perm.). One-half
15168 mile south of Pleasant Grove, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920,
p. 145, Pl. XI, Figs. 17-21.
- 14044 *Loxonema scitulum* Meek and Worthen. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 312, Pl. XVI,
Fig. 2.

- 9792 *Marginifera muricata* var. *missouriensis* Girty. Plesiotypes (3).
Upper Pottsville (Penn.). Carbon Hill, Hocking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 184, Pl. IX, Figs. 1-3.
- 15327 *Marginifera muricata* var. *missouriensis* Girty. Plesiotypes (2).
Lower Mercer limestone, Pottsville (Penn.). Near White Cottage, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 184, Pl. IX, Figs. 4, 5.
- 14019 *Marginifera wabashensis* (Norwood and Pratten). Plesiotype.
Cambridge limestone, Conemaugh (Penn.). Norwich, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 185, Pl. IX, Fig. 10.
See *Productus longispinus*.
- 15318 *Marginifera wabashensis* (Norwood and Pratten). Plesiotypes (3).
to Lower Mercer limestone, Pottsville (Penn.). Near white
15320 Cottage, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 185, Pl. IX, Figs. 6-9.
- 3316 *Marsipocrinus praematurus* (Hall and Whitfield). Paratypes (18).
3323 See *Platycrinus praematurus*.
- 15758 *Megalonyx jeffersoni* Desmarest. Plesiotype.
Pleistocene. Berlin Tp., Holmes Co., Ohio.
CLAYPOLE. *Am. Geol.*, Vol. VII, 1891, pp. 122-132, 149-153.
OSBORN. *Age of Mammals*, 1910, p. 465, Fig. 203.
HAY. *Geol. Surv. Ind.*, Vol. XXXVI, 1911, p. 558; *Geol. Surv. Iowa*, Vol. XXIII, 1912, p. 107.
- 3962 *Melanocrinus bainbridgensis* Hall and Whitfield. Cotypes (4).
to Huron shale (Up. Dev.). Bainbridge, Ohio.
- 3965 HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 158, Pl. 13, Figs. 2-3.
- 3528 *Meristella bella* Whitfield (not Hall.)¹ Cotype.
Greenfield dolomite, Monroe (Sil.). Greenfield, Ohio.
WHITFIELD. *Ann. New York Acad. Sci.*, Vol. 5, 1891, p. 510, Pl. 5, Fig. 8;
Geol. Surv. Ohio, Vol. VII, 1893, p. 412, Pl. I, Fig. 8.
SHERZER. *Geol. Surv. Mich.*, Vol. VII, Pt. 1, 1900, p. 223, Pl. XVII, Fig. 8.
= *Hindella* (?) (*Greenfieldia*) *whitfieldi*.
- 8995 *Metacoceras pottsvillensis* Morningstar. Holotype.
Lower Mercer limestone, Pottsville (Penn.). Near Hanging Rock, Lawrence Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 269, Pl. XVI, Figs. 7, 8.
- 3023 *Modiolodon oviformis* (Ulrich). Paratypes? (2).
Trenton (Ord.). Frankfort, Kentucky.
ULRICH. *Geol. Surv. Ohio*, Vol. VII, 1893, p. 652, Pl. LIII, Fig. 7.
See *Modiolopsis oviformis*.

¹ See footnote under *Hindella* (?) (*Greenfieldia*) *whitfieldi*, p. 47.

- 3024 *Modiolopsis cincinnatiensis* Hall and Whitfield. Cotype.
Cincinnatian (Ord.). Cincinnati, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 88, Pl. II, Fig. 14.
= *Whiteavesia cincinnatiensis*.
- 3023 *Modiolopsis oviformis* Ulrich. Paratypes? (2).
Trenton (Ord.). Frankfort, Kentucky.
ULRICH. *Am. Geol.*, Vol. V, 1890, p. 276, Figs. 4a-c.
= *Modiolodon oviformis*.
- 7022 A, B *Monomerella greeni* Hall. Holotype and Paratype.
Guelph dolomite, Niagaran (Sil.). Rising Sun, Wood Co., Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 1, 1892, pp. 42, 175,
Pl. 44D, Fig. 6; *14th Rep. State Geol. New York*, for 1894, 1897, p. 328,
Pl. I, Fig. 10; *48th Rep. New York State Mus.*, Vol. II, for 1895,
1897, p. 328, Pl. I, Fig. 10.
- 3145 *Monomerella ortonii* Hall and Clarke. Holotype.
Guelph dolomite, Niagaran (Sil.). Rising Sun, Wood Co., Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 1, 1892, pp. 42, 175,
Pl. 40, Figs. 14, 15; *14th Rep. State Geol. New York* for 1894, 1897,
p. 330, Pl. II, Figs. 4, 5; *48th Rep. New York State Mus.*, Vol. II, for
1895, 1897, p. 330, Pl. II, Figs. 4, 5.
- Monticulipora pernodosa* Shideler mss. Chirotype.
Waynesville, Cincinnatian (Ord.). Oxford, Ohio.
SHIDELER. *Manuscript on Cincinnati Fossils from Southwestern Ohio*.
- 12214 *Murchisonia vermicula* Hall. Plesiotype.
Maxville (Miss.). Cut 4, Mt. Perry-Fultonham, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911,
p. 409, Figs. 32a, b.
- 15269 *Myalina pernaformis* (Cox). Plesiotypes (3).
to Boggs limestone, Pottsville (Penn.). Near Hopewell P. O.,
15271 Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 217,
Pl. XI, Figs. 7-9.
- 15267 *Myalina pernaformis* (Cox) var. Figured (2).
15268 Harrison ore, Pottsville (Penn.). Hamilton Tp., Jackson
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 218,
Pl. XI, Figs. 5, 6.
- 9819 *Myalina recurvirostris* var. *sinuosa* Morningstar. Cotypes (3).
15272 Lower Mercer limestone, Pottsville (Penn.). Near Adams
15273 Mills, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 219,
Pl. XI, Figs. 10-12.
- 4587 *Myalina swallowi* McChesney. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Millersburg, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 219, Pl.
XI, Fig. 13.
- 3953 *Mylostoma terrelli* Newberry. Plastotype.
Cleveland shale (Up. Dev.). Sheffield, Ohio.
NEWBERRY. *Pal. Fishes of N. Am.*, U. S. Geol. Surv., Mono. XVI, 1889,
p. 165, Pl. XIV, Figs. 1, 2.

- 3946 *Mylostoma variabilis* Newberry. Plastotypes (4).
3948 Cleveland shale (Up. Dev.). Sheffield, Ohio.
3949 NEWBERRY. *Pal. Fishes of N. Am., U. S. Geol. Surv., Mono. XVI, 1889,*
3952 p. 165, Pl. XV, Figs. 1-5a.
- 15250 *Naiadites elongata* Dawson. Plesiotypes (2).
15251 Bear Run coal, Pottsville (Penn.). Elk Fork, Vinton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio, Fourth Ser., Bull. 25, 1922, p. 220,*
Pl. XII, Figs. 7, 8.
- 15252 *Naiadites elongata* Dawson. Plesiotype.
Sharon ore, Pottsville (Penn.). Head of Higgins Run, Scioto
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio, Fourth Ser., Bull. 25, 1922, p. 220,*
Pl. XII, Fig. 9.
- 15279 *Naiadites ohioense* Morningstar. Cotypes (3).
to Sharon ore, Pottsville (Penn.). Head of Higgins Run, Scioto
15281 Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio, Fourth Ser., Bull. 25, 1922, p. 221,*
Pl. XII, Figs. 10-13.
- 15310 *Naticopsis altonensis* (McChesney). Plesiotype.
Boggs limestone, Pottsville (Penn.). Near Hopewell P. O.,
Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio, Fourth Ser., Bull. 25, 1922, p. 255,*
Pl. XV, Fig. 15.
- 15169 *Naticopsis (?) diminuta* Stauffer and Schroyer. Cotypes (2).
15170 Base of Lower Washington limestone, Dunkard (Perm.).
One-half mile south of Pleasant Grove, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio, Fourth Ser., Bull. 22, 1920,*
p. 145, Pl. XI, Figs. 22, 23.
- 15311 *Naticopsis pulchella* Morningstar. Holotype.
Lower Mercer limestone, Pottsville (Penn.). Near East
Greenville, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio, Fourth Ser., Bull. 25; 1922, p. 256,*
Pl. XV, Fig. 16.
- 15243 *Naticopsis tortum* (Meek). Plesiotype.
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio, Fourth Ser., Bull. 25, 1922, p. 257,*
Pl. XV, Figs. 17, 18.
- 14030 *Nucula anodontoides* Meek. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio, Fourth Ser., Bull. 17, 1912, p. 306, Pl. XIV,*
Fig. 14.
- 15262 *Nucula elongata* Morningstar. Cotypes (2).
15263 Sharon ore, Pottsville (Penn.). Near mouth of Lick Run,
Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio, Fourth Ser., Bull. 25, 1922, p. 201, Pl.*
X, Figs. 10-13.
- 14029 *Nucula ventricosa* Hall. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio, Fourth Ser., Bull. 17, 1912, p. 306, Pl. XIV,*
Fig. 13.

- 15264 *Nuculopsis ventricosa* (Hall). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Near White Cottage, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 204, Pl. X, Fig. 20.
- 3208 *Nuculites (Cleidophorus) ferrugineum* Foerste.¹ Holotype.
Brassfield (Sil.). Todd's Fork, Wilmington, Ohio.
FOERSTE. *Geol. Surv. Ohio*, Vol. VII, 1893, p. 564, Pl. XXXVII, Figs. 2, 2b.
= *Clidophorus ferrugineus*.
- 14154 *Onychodus ortonii* Newberry. Holotype.
Huron shale (Up. Dev.). Perry Tp., Franklin Co., Ohio.
NEWBERRY. *Pal. Fishes of N. Am.*, U. S. *Geol. Surv.*, Mono XVI, 1889, p. 71, Pl. XIX, Figs. 1, 1a.
- 3405 *Ophiodoceras wilmingtontense* Foerste. Chiroholotype.
Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 15219 *Orbiculoidea stoutella* Morningstar. Cotypes (3).
to Harrison ore, Pottsville (Penn.). Hamilton Tp., Jackson
- 15221 Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 173, Pl. VII, Figs. 5-8.
- 4467 *Orthocanthus gracilis* Newberry. Holotype.
Upper Fremont limestone, Allegheny (Penn.). Linton, Ohio.
NEWBERRY. *Pal. Ohio*, Vol. II, 1875, p. 56, Pl. LIX, Fig. 7.
- 3428 *Orthoceras annulatum* Hall and Whitfield. Paratypes (9).
- 3432 Niagaran (Sil.). Cedarville, Yellow Springs, and Covington,
- 3499 Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 147, Pl. 9, Fig. 1.
= *Dawsonoceras annulatum*.
- 3423A *Orthoceras crebescens* Hall and Whitfield (not Hall). Holotype.
Niagaran (Sil.). Cedarville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 148, Pl. IX, Fig. 2.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 545, Fig.
- = *Orthoceras whitfieldi*.
- 4710 *Orthoceras isogramma* Meek. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge, Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 266, Pl. XVI, Fig. 5.
- 15239 *Orthoceras isogramma* Meek. Plesiotype.
Upper Mercer limestone, Pottsville (Penn.). Jefferson Tp., Coshocton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 266, Pl. XVI, Fig. 6.

¹ In the description of this species Foerste states that the specimen was found on the same slab as *Cyrtodonta (?) ferruginea* (Hall and Whitfield) (see *Cypri-cardites ferrugineum* of this catalogue); however, a careful examination of this piece of rock shows that the type is not present, and therefore must subsequently have been broken away. This entry is made because of the above reference by Foerste.

- 12217 *Orthoceras okawense* (?) Worthen. Plesiotype.
Maxville (Miss.). White Cottage, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911, p. 416, Fig. 36.
- 12216 *Orthoceras randolphense* Worthen. Plesiotype.
Maxville (Miss.). White Cottage, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911, p. 414, Fig. 35.
- 3423A *Orthoceras whitfieldi* Foerste mss. Chiroholotype.
Niagaran (Sil.). Cedarville, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
See *Orthoceras crebescens* Hall and Whitfield (not Hall).
- 2997 *Orthodesma contractum* (Hall). Plesiotype.
Cincinnatian (Ord.). Near Waynesville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 96, Pl. II, Figs. 4, 5.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 563, Figs.
- 2992 *Orthodesma curvatum* Hall and Whitfield. Paratypes (2).
Waynesville, Cincinnatian (Ord.). Waynesville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 95, Pl. II, Fig. 6.
- 9054 *Orthodesma rectum* Hall and Whitfield. Paratypes (2).
Waynesville, Cincinnatian (Ord.). Waynesville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 94, Pl. II, Figs. 7, 8.
- 14053 *Orthonema bilineatum* Mark. Holotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*. Fourth Ser., Bull. 17, 1912, p. 316, Pl. XVI, Fig. 14.
- 15332 *Orthonema subtaeniatum* Geinitz. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*. Fourth Ser., Bull. 17, 1912, p. 316, Pl. XVI, Fig. 3.
- 12212 *Orithonychia acutirostre* Hall. Plesiotype.
Maxville (Miss.). Cut 4, Mt. Perry-Fultonham, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911, p. 406, Fig. 30.
- 3238 *Palaeodictyota bella* (Hall and Whitfield). Holotype.
See *Inocaulis bella*.
- 15185 *Palaeoniscus* sp. Figured (2).
- 15186 Elm Grove limestone, Dunkard (Perm.). Raven Rocks, two miles north of Beallsville, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920, p. 146, Pl. XIII, Figs. 38, 39.
- 10422 *Paleschara beani* (James). Holotype.
See *Ceramopora* (?) *beani*.
- 15265 *Parallelodon obsoletus* (Meek and Worthen). Plesiotypes (2).
- 15266 Upper Pottsville (Penn.). Carbon Hill, Hocking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 205, Pl. XI, Figs. 1, 2.

- 14032 *Parallelodon tenuistriatus* (Meek and Worthen). Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 307, Pl. XV,
Fig. 2.
MORNINGSTAR. *Idem.*, Bull. 25, 1922, p. 210, Pl. X, Figs. 30, 31.
- 15305 *Patellostium montfortianum* (Norwood and Pratten). Plesiotype.
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 251,
Pl. XIV, Fig. 14.
- 5885 *Pentamerous oblongus* Sowerby. Plesiotype.
Niagaran (Sil.). Hillsboro, Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 2, 1895, p. 237, Pl. 67,
Fig. 20.
- 3364 *Pentamerous pergibbosus* Hall and Whitfield. Paratypes (10).
Niagaran (Sil.). Greenville and Rising Sun, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 139, Pl. VII, Figs.
10, 11.
- 3306 *Pentremites subcylindrica* Hall and Whitfield. Holotype and
Paratype.
Niagaran (Sil.). Yellow Springs, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 128, Pl. VI, Fig. 13.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 622, Fig.
= *Troostocrinus subcylindricus*.
- 3298 *Periechocrinus ornatus* (Hall and Whitfield). Holotype and
Paratype.
See *Saccocrinus ornatus*.
- 8743 *Periechocrinus tennesseensis* (Hall). Paratypes (6).
- 3297 See *Saccocrinus tennesseensis*.
- 3379 *Phanerotrema occidens* (Hall). Plesiotype.
See *Pleurotomaria occidens*.
- 4592 *Pharkidonotus percarinatus* (Conrad). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 248,
Pl. XV, Fig. 6.
- 4701 *Phillipsia trinucleata* Herrick. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 274,
Pl. XVI, Fig. 9.
- 7302 *Phragmoceras aurora* Foerste mss. Chiroholotype and Chiro-
paratypes (3).
Niagaran (Sil.). Rising Sun, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 14809B *Phragmoceras aurora* Foerste. Chiroparatype.
Niagaran (Sil.). Bowling Green, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 10912 *Phragmoceras carmani* Foerste. Chiroholotype.
Niagaran (Sil.). Greene Co., Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.

- 9442A *Phragmoceras collicaire* Foerste. Chiroparatype.
Niagaran (Sil.). Bowling Green, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 3413 *Phragmoceras ellipticum* Hall and Whitfield. Holotype.
Niagaran (Sil.). Highland Co., Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 152, Pl. VIII, Fig. 11.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 637, Fig.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 3414 *Phragmoceras hillsboroense* Foerste. Chirololotype.
Niagaran (Sil.). Highland Co., Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 5889 *Phragmoceras parvum* Hall and Whitfield. Holotype.
Niagaran (Sil.). Cedarville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 151, Pl. VIII, Fig. 10.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 9441A *Phragmoceras wilmingtontense* Foerste. Chiroparatype.
Niagaran (Sil.). Bowling Green, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 4609 *Placunopsis* (?) *reticardinalis* Meek. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 233, Pl.
XII, Fig. 19.
- 15341 *Plagioglypta prosseri* Morningstar. Cotype.
Lower Mercer limestone, Pottsville (Penn.). Near Fairview
School, Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 245,
Pl. XVI, Fig. 3.
- 4340 *Platycrinus bedfordensis* Hall and Whitfield. Holotype.
Upper Erie shale (Up. Dev.). Bedford, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 161, Pl. XIII, Fig. 4.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 686, Fig.
- 3316 *Platycrinus praematurus* Hall and Whitfield. Paratypes (18).
- 3323 Niagaran (Sil.). Cedarville and Greenville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 124, Pl. VI, Figs. 3-6.
= *Marsipocrinus praematurus*.
- 14038 *Pleurophorella geinitzi* (Meek). Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 240,
Pl. XIII, Figs. 18, 19.
See *Allerisma geinitzi*.
- 15294 *Pleurophorella sesquiplicata* Price. Plesiotypes (2).
- 15295 Lower Mercer limestone, Pottsville (Penn.). Rock Hollow,
Vinton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 235,
Pl. XIII, Figs. 16, 17.
- 15303 *Pleurophorus immaturus* Herrick. Plesiotypes (2).
- 15328 Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 236, Pl.
XIV, Figs. 5, 7.

- 15302 *Pleurophorus immaturus* Herrick. Plesiotype.
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 236, Pl. XIV, Figs. 6, 8.
- 14039 *Pleurophorus oblongus* Meek. Plesiotype.
Portersville limestone, Conemaugh (Penn.). Portersville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 310, Pl. XV, Fig. 12.
- 15155 *Pleurophorus* (?) *ohioensis* Stauffer and Schroyer. Cotypes (2).
15156 Elm Grove limestone, Dunkard (Perm.). Two miles west of Martins Ferry, Ohio.
STAUFFER and SCHROYER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 22, 1920, p. 143, Pl. XI, Figs. 6, 7.
- 15248 *Pleurophorus spinulosa* Morningstar. Cotypes (2).
15249 Lower Mercer limestone, Pottsville (Penn.). Bald Knob, Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 239, Pl. XIV, Figs. 9-11.
- 15296 *Pleurophorus tropidophorus* Meek. Plesiotypes (2).
15297 Lower Mercer limestone, Pottsville (Penn.). Near Fairview School, Muskingum Co., and Flint Ridge, Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 240, Pl. XIII, Figs. 20, 21.
- 15242 *Pleurotomaria carbonaria* Norwood and Pratten. Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge, Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 252, Pl. XV, Fig. 14.
- 3379 *Pleurotomaria occidens* Hall and Whitfield. Plesiotype.
Niagaran (Sil.). Yellow Springs, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 142, Pl. VIII, Fig. 2.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 713, Fig.
= *Phanerotrema occidens*.
- 15309 *Pleurotomaria ornatiformis* Morningstar. Cotypes (7).
Harrison ore, Pottsville (Penn.). Hamilton Tp., Jackson Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 253, Pl. XV, Figs. 7-13.
- 15274 *Posidonia girtyi* Morningstar. Cotypes (4).
to 4 Lower Mercer limestone, Pottsville (Penn.). Rock Hollow,
15277 Vinton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 214, Pl. XII, Figs. 1-4.
- 15278 *Posidonia vintonensis* Morningstar. Cotypes (2).
Lower Mercer limestone, Pottsville (Penn.). Rock Hollow, Vinton Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 216, Pl. XII, Figs. 5, 6.

- 9888 *Poterioceras genuiflexum* Foerste mss. Chiroparatype.
Niagaran (Sil.). Highland Co., Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 5903 *Poterioceras genuiflexum* Foerste mss. Chiroholotype.
Niagaran (Sil.). Hillsboro, Ohio.
FOERSTE. *Manuscript on Silurian Cephalopoda*.
- 13295 *Productella hirsuta* Hall. Plesiotypes (2).
- 13298 Chagrin (Up. Dev.). Tinkers Creek, Bedford, Cuyahoga Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 547, Pl. XXXII, Figs. 8, 9.¹
- 13257 *Productella hirsuta* var. *rectispina* Hall. Plesiotypes (3).
- 13296 Chagrin (Up. Dev.). Brandywine Creek below Falls, Cuyahoga Co., Ohio.
- 13297 Chagrin (Up. Dev.). Tinkers Creek, Bedford, Cuyahoga Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 542, Pl. XXXIII, Figs. 11-13.
- 12189 *Productus cestriensis* Worthen. Plesiotypes (7).
- 12190 Maxville (Miss.). Cut 6, Mt. Perry-Fultonham, and Kroft Bridge, White Cottage, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper 17, 1911, p. 372, Fig. 9.
- 15230 *Productus cora* D'Orbigny. Plesiotypes (3).
to Lower Mercer limestone, Pottsville (Penn.). Near Fairview
- 15232 School, Muskingum Co., and Flint Ridge, Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 180, Pl. VIII, Figs. 1-3.
- 14020 *Productus costatus* Sowerby. Plesiotype.
Cambridge limestone, Conemaugh (Penn.). Northup, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 302, Pl. XIII, Fig. 9.
- 14019 *Productus longispinus* Sowerby. Plesiotype.
Cambridge limestone, Conemaugh (Penn.). Norwich, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 302, Pl. XIII, Fig. 8.
= *Marginifera wabashensis*.
- 14018 *Productus pertenuis* Meek. Plesiotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 303, Pl. XIII, Fig. 7.
= *Pustula pertenuis*.
- 12188 *Productus pileiformis* McChesney. Plesiotypes (3).
Maxville (Miss.). White Cottage, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Special Paper 17, 1911, p. 370, Figs. 8a-c.
- 14017 *Productus punctatus* (Martin). Plesiotype.
Cambridge limestone, Conemaugh (Penn.). Cambridge, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 303, Pl. XIII, Fig. 6.
= *Pustula punctatus*.

¹ The specimen shown in Fig. 7 is not in this collection.

- 15233 *Productus semireticulatus* (Martin) var. Figured (2).
 15234 Lower Mercer limestone, Pottsville (Penn.). Symmes Creek,
 Muskingum Co., Ohio.
 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 181,
 Pl. VIII, Figs. 4, 5.
- 9823 *Productus semireticulatus* (Martin). Plesiotype.
 Lower Mercer limestone, Pottsville (Penn.). Blunt Run,
 Muskingum Co., Ohio.
 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 181,
 Pl. VIII, Fig. 6.
- 15214 *Prismopora sereata* (Meek). Plesiotype.
 McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton Co.,
 Ohio.
 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 165,
 Pl. VI, Fig. 21.
- 4210 *Promacrus andrewsi* Meek. Holotype.
 Waverly (Miss.). Sciotoville, Ohio.
 MEEK. *Pal. Ohio*, Vol. II, 1875, p. 308, Pl. 17, Figs. 1a, b.
 LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, pp. 772, 773, Figs.
- 15304 *Prothyris elegans* Meek. Plesiotype.
 Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
 Licking Co., Ohio.
 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 195,
 Pl. XIV, Fig. 12.
- 10421 *Ptilodictya flagellum* Nicholson. Holotype.
 Richmond (Ord.). Lebanon, Ohio.
 NICHOLSON. *Am. Mag. Nat. Hist.*, Fourth Ser., 15, 1875, p. 179, Pl. XIV,
 Figs. 3-3b.; *Pal. Ohio*, Vol. II, 1875, p. 262, Pl. 25, Figs. 4-4b.
 LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 827, Figs.
- 3292 *Ptiloporella nervata* (Nicholson). Holotype.
 See *Fenestella nervata*.
- 14023 *Pugnax utah* (Marcou). Plesiotypes (2).
 Ames limestone, Conemaugh (Penn.). Steubenville, Ohio.
 MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 303, Pl. XIV,
 Figs. 3, 4.
- 14018 *Pustula pertenuis* (Meek). Plesiotype.
 Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 183, Pl.
 VIII, Fig. 8.
 See *Productus pertenuis*.
- 14017 *Pustula punctatus* (Martin). Plesiotype.
 Cambridge limestone, Conemaugh (Penn.). Cambridge, Ohio.
 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 183,
 Pl. VII, Fig. 9.
 See *Productus punctatus*.
- 14905 *Receptaculites ohioensis* Hall and Whitfield. Paratype.
 Niagaran (Sil.). Yellow Springs, Ohio.
 HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 123, Pl. VI, Fig. 1.

- 13299 *Reticularia praematura* (Hall) Schuchert. Plesiotypes (2).
 13300 Chagrin (Up. Dev.). Two miles east of Trumbull Center, Trumbull Co., Ohio.
 PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 535, Pl. XXIX, Figs. 7, 8.
- 3513 *Retzia formosa* Whitfield (not Hall). Cotype.
 Greenfield dolomite, Monroe (Sil.). Greenfield, Ohio.
 WHITFIELD. *Ann. New York Acad. Sci.*, Vol. V, 1891, p. 512, Pl. V, Fig. 16; *Geol. Surv. Ohio*, Vol. VII, 1893, p. 413, Pl. I, Fig. 16.
 SHERZER. *Geol. Surv. Mich.*, Vol. VII, Pt. 1, 1900, p. 224, Pl. XVII, Fig. 16.
 = *Rhynchospira praeformosa*.
- 14021 *Rhipidomella pecosi* (Marcou). Plesiotype.
 Ames limestone, Conemaugh (Penn.). Deersville, Ohio.
 MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 303, Pl. XIII, Fig. 10.
 MORNINGSTAR. *Idem.*, Bull. 25, 1922, p. 175, Pl. VII, Fig. 13.
- 4500 *Rhizodus lancifer* Newberry. Holotype.
 Upper Freeport limestone, Allegheny (Penn.). Linton, Ohio.
 NEWBERRY. *Proc. Acad. Nat. Sci. Phil.*, loc. cit.; *Pal. Ohio*, Vol. I, 1873, p. 342, Pl. 39, Fig. 9.
 LESLEY. *Geol. Surv. P. Pa.*, P. 4, 1889, p. 876, Fig.
- 3515 *Rhynchonella hydraulica* Whitfield. Holotype.
 Greenfield dolomite, Monroe (Sil.). Greenfield, Ohio.
 WHITFIELD. *Ann. New York Acad. Sci.*, Vol. II, 1882, p. 194; *Idem.*, Vol. V, 1891, p. 512, Pl. V, Fig. 17; *Geol. Surv. Ohio*, Vol. VII, 1893, p. 414, Pl. I, Fig. 17.
 SHERZER. *Geol. Surv. Mich.*, Vol. VII, Pt. 1, 1900, p. 128, Pl. XVII, Fig. 17.
 = *Camarotoechia hydraulica*.
- 3513 *Rhynchospira praeformosa* Grabau. Cotype.
 Greenfield dolomite, Monroe (Sil.). Greenfield, Ohio.
 GRABAU. *Geol. Surv. Mich.*, Ser. 1, 1909, p. 131, Pl. XXX, Fig. 16.
 See *Retzia formosa*.
- 3298 *Saccocrinus ornatus* Hall and Whitfield. Holotype and Paratype.
 Niagaran (Sil.). Yellow Springs, Ohio.
 HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 126, Pl. VI, Figs. 7-9.
 LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 917, Figs.
 = *Periechocrinus ornatus*.
- 8743 *Saccocrinus tennesseensis* Hall and Whitfield. Paratypes (6).
 3297 Niagaran (Sil.). Yellow Springs, Ohio.
 HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 125, Pl. VI, Fig. 10.
 LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 917, Fig.
 = *Periechocrinus tennesseensis*.
- 15285 *Schizodus affinis* Herrick. Plesiotype.
 McArthur limestone, Pottsville (Penn.). Monroe Furnace, Jackson Co., Ohio.
 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 223, Pl. XII, Fig. 17.

- 15247 *Schizodus amplus* Meek and Worthen. Plesiotype.
Boggs limestone, Pottsville (Penn.). Near Hopewell, P. O.,
Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 222,
Pl. XII, Fig. 18.
- 4591 *Schizodus cuneatus* Meek. Plesiotypes (2).
Lower Mercer limestone, Pottsville (Penn.). Flint Ridge,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 223,
Pl. XIII, Figs. 1, 2.
- 15282 *Schizodus subcircularis* Herrick. Plesiotypes (3).
to McArthur limestone, Pottsville (Penn.). Monroe Furnace,
15284 Jackson Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 225,
Pl. XII, Figs. 14-16.
- 15244 *Schizostoma catilloides* (Conrad). Plesiotypes (2).
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton
Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 255, Pl.
XV, Figs. 19, 20.
- 3512 *Schuchertella hydraulica* (Whitfield). Cotypes (2).
Greenfield dolomite, Monroe (Sil.). Greenfield, Ohio.
GRABAU. *Geol. Surv. Mich.*, Geol. Ser. 1, 1909, p. 120, Pl. 30, Figs. 1-3.
See *Streptorhynchus hydraulicum*.
- 14058 *Soleniscus aplatus* Mark. Holotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 318, Pl. XVI,
Fig. 19.
- 14057 *Soleniscus brevis* White. Plesiotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 318, Pl. XVI,
Fig. 18.
= *Sphaerodoma ventricosa* (Hall), not *Sphaerodoma brevis*
(White).
- 14056 *Soleniscus paludinaeformis* (Hall). Plesiotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 317, Pl. XVI,
Fig. 17.
= *Sphaerodoma paludinaeformis*.
- 14055 *Soleniscus typicus* Meek and Worthen. Plesiotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 317, Pl. XVI,
Fig. 16.
- 15255 *Solenomorpha lamborni* Morningstar. Cotypes (2).
Sharon ore, Pottsville (Penn.). Near mouth of Lick Run,
Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 195,
Pl. X, Fig. 3.

- 15245 *Solenomya* (?) *sharonensis* Morningstar. Holotype.
Sharon ore, Pottsville (Penn.). Near mouth of Lick Run,
Scioto Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 195,
Pl. X, Figs. 1, 2.
- 15312 *Sphaerodoma brevis* (White). Plesiotype.
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton Co.,
Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 261,
Pl. XV, Fig. 22.
- 15313 *Sphaerodoma brevis* (White). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Near East
Greenville, Stark Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, P. 261,
Pl. XV, Figs. 23, 24.
- 14056 *Sphaerodoma paludinaeformis* (Hall). Plesiotype.
See *Soleniscus paludinaeformis*.
- 14057 *Sphaerodoma ventricosa* (Hall). Plesiotype.
See *Soleniscus brevis*.
- 15321 *Spirifer boonensis* Swallow? Plesiotypes (5).
to Boggs limestone, Pottsville (Penn.). Near Hopewell P. O.,
15324 Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 186, Pl.
IX, Figs. 21-25.
- 14022 *Spirifer cameratus* Morton. Plesiotype.
Cambridge limestone, Conemaugh (Penn.). Langsville, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 304, Pl. XIV,
Figs. 1, 2.
MORNINGSTAR. *Idem.*, Bull. 25, 1922, p. 188, Pl. IX, Figs. 11, 12.
- 13301 *Spirifer disjunctus* Sowerby. Plesiotypes (3).
to Chagrin (Up. Dev.). Brandywine Creek below Falls, Cuy-
13303 ahoga Co., Ohio.
PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 534, Pl. XXIX,
Figs. 3-6.
- 15325 *Spirifer opimus* Hall. Plesiotypes (8).
to Upper Pottsville (Penn.). Carbon Hill, Hocking Co., Ohio.
15326 MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 188,
Pl. IX, Figs. 13-20.
- 10356 *Spiriferina kentuckyensis* (Shumard). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Union Furnace,
Vinton Co., Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 2, 1894, p. 51, Pl.
XXIX, Fig. 17.
- 15212 *Streblotrypa merceri* Morningstar. Holotype.
Lower Mercer limestone, Pottsville (Penn.). Bald Knob,
Licking Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 164, Pl.
VI, Figs. 16, 17.

- 3512 *Streptorhynchus hydraulicum* Whitfield. Cotypes (2).
Greenfield dolomite, Monroe (Sil.?). Greenfield, Ohio.
WHITFIELD. *Ann. New York Acad. Sci.*, Vol. II, 1882, p. 193; *Idem.*, Vol. V, 1891, p. 508, Pl. V, Figs. 1-3; *Geol. Surv. Ohio*, Vol. VII, 1893, p. 410, Pl. I, Figs. 1-3.
SHERZER. *Geol. Surv. Mich.*, Vol. VII, Pt. 1, 1900, Pl. XVII, Figs. 1-3.
= *Schuchertella hydraulica*.
- 10419 *Stromatopora scabra* James. Holotype.
Cincinnatian (Ord.). Lebanon, Ohio.
JAMES. *Paleontologist*, 3, 1879; *Jour. Cinci. Soc Nat. Hist.*, Vol. IX, 1886, p. 251; *Idem.*, 1892, p. 91.
= *Dermatostroma scabrum*.
- 13304 *Strophalosia muricata* (Hall). Plesiotypes (4).
to Chagrin (Up. Dev.). Crooked Creek, Ashtabula Co., Ohio.
- 13307 PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 542, Pl. XXXII, Figs. 10-13.
- 12213 *Strophostylus carleyana* Hall. Plesiotype.
Maxville (Miss.). Cut 4, Mt. Perry-Fultonham, Ohio.
MORSE. *Proc. Ohio Acad. Sci.*, Vol. V, Pt. 7, Special Paper, 17, 1911, p. 408, Fig. 31.
- 3743 *Stylasteria anna* Whitfield. Paratypes (3).
Columbus limestone (Dev.). Antwerp, Ohio.
WHITFIELD. *Ann. New York Acad. Sci.*, Vol. II, 1882, p. 199; *Idem.*, Vol. V, 1891, Pl. VI, Figs. 1-5; *Geol. Surv. Ohio*, Vol. VII, 1893, p. 420, Pl. II, Figs. 1-5.
= *Acervularia davidsoni*.
- 3390 *Subtulites terebriformis* Hall and Whitfield. Holotype.
Niagaran (Sil.). Clifton, Greene Co., Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 141, Pl. 8, Fig. 6.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 1143, Fig.
- 15317 *Squamularia perplexa* (McChesney). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Blunt Run, Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 191, Pl. IX, Figs. 26, 27.
- 13308 *Syringothyris texta* var. *chemungensis* Cushing. Plesiotypes (4).
- 13312 Chagrin (Up. Dev.). Mill Creek, north of Jefferson, Ashtabula Co., Ohio.
- 13314 PROSSER. *Geol. Surv. Ohio*, Fourth Ser., Bull. 15, 1912, p. 537, Pl. XXXI, Figs. 1-5.
- 15201 *Textularia* sp. Figured (2).
Upper Mercer flint, Pottsville (Penn.). Near Rock Cut, Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 152, Pl. VI, Figs. 1, 2.
- 3376 *Trimerella grandis* Billings. Plesiotype.
Niagaran (Sil.). Near Sinking Springs, Highland Co., Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 1, 1892, Pl. 4A, Figs. 1, 2.

- 9009 *Trimerella ohioensis* Meek. Plesiotype.
Niagaran, Guelph (Sil.). Genoa, Ottawa Co., Ohio.
HALL and CLARKE. *Pal. New York*, Vol. VIII, Pt. 1, 1892, Pl. 4A,
Figs. 5, 6.
- 9003 *Triplecia ortonii* (Meek). Cotype.
Top of Brassfield (Sil.). Near Dayton, Ohio.
MEEK. *Geol. Surv. Ohio*, Vol. I, 1873, p. 178, Pl. XV, Fig. 1f.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 1226, Fig.
See *Dicraniscus ortonii*.
- 3380 *Trochonema pauper* var. *ohioensis* Hall and Whitfield. Holotype.
Niagaran (Sil.). Greenville, Ohio.
HALL and WHITFIELD. *Pal. Ohio*, Vol. II, 1875, p. 143, Pl. 8, Fig. 4.
LESLEY. *Geol. Surv. Pa.*, P. 4, 1889, p. 1230, Fig.
- 3306 *Troostocrinus subcylindricus* (Hall and Whitfield). Holotype and
Paratype.
Niagaran (Sil.). Yellow Springs, Ohio.
FOERSTE. *Ohio Jour. Sci.*, Vol. XXI, No. 2, Dec., 1920, p. 65, Pl. III,
Figs. 3a, b.
See *Pentremites subcylindrica*.
- 3024 *Whiteavesia cincinnatiensis* (Hall and Whitfield). Cotype.
See *Modiolopsis cincinnatiensis*.
- 2988 *Whitella ohioensis* Ulrich. Holotype.
Cincinnatian (Ord.). Waynesville, Ohio.
ULRICH. *Geol. Surv. Ohio*, Vol. VII, 1893, p. 678, Fig. 2.
- 14043 *Worthenia beedei* Mark. Holotype.
Ames limestone, Conemaugh (Penn.). New Concord, Ohio.
MARK. *Geol. Surv. Ohio*, Fourth Ser., Bull. 17, 1912, p. 312, Pl. XVI,
Fig. 1.
- 15315 *Zygopleura plenum* (Herrick). Plesiotype.
Lower Mercer limestone, Pottsville (Penn.). Near Fairview
School, Muskingum Co., Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 258,
Pl. XVI, Fig. 1.
- 15316 *Zygopleura plenum* (Herrick). Plesiotype.
McArthur limestone, Pottsville (Penn.). Elk Tp., Vinton Co.,
Ohio.
MORNINGSTAR. *Geol. Surv. Ohio*, Fourth Ser., Bull. 25, 1922, p. 258,
Pl. XVI, Fig. 2.

Received for publication November 27, 1923.